

We claim:

1. A method of inhibiting unwanted cell proliferation comprising, determining whether cells overexpress a *gli* gene, and contacting cells that overexpress a *gli* gene with an effective amount of a hedgehog antagonist; whereby said antagonist causes decreased cell proliferation.
2. A method of claim 1, wherein said *gli* gene is *gli-1*.
3. A method of claim 1, wherein said unwanted cell proliferation is cancer.
4. A method of claim 3, wherein said cancer is urogenital cancer.
5. A method of claim 3, wherein said cancer is associated with one or more of lung, prostate, breast, bladder, and colon tissues.
6. A method of claim 5, wherein said form of cancer associated with breast tissue is selected from inferior ductal carcinoma, inferior lobular carcinoma, intraductal carcinoma, medullary carcinoma and tubular carcinoma.
7. A method of claim 5, wherein said cancer associated with lung tissue is selected from adenocarcinoma, broncho-alveolar adenocarcinoma and small cell carcinoma.
8. A method of claim 5, wherein said cancer associated with the prostate is adenocarcinoma.
9. A method of claim 1, wherein said unwanted cell proliferation is benign prostatic hyperplasia.
10. A method for determining a treatment protocol comprising, obtaining a tissue sample from a patient, and determining levels of *gli* gene expression in said sample,

wherein overexpression of a *gli* gene indicates that treatment with a hedgehog antagonist is appropriate.

11. A method of claim 10, wherein said *gli* gene is *gli-1*.
12. A method of claim 11, wherein *gli-1* expression levels are determined by measuring *gli-1* transcript levels.
13. A method of claim 11, wherein said *gli-1* levels are determined by measuring *gli-1* protein levels.
14. A method of stimulating surfactant production in a lung cell comprising contacting said cell with an amount of *hedgehog* antagonist effective to stimulate surfactant production.
15. A method of stimulating lamellated body formation in a lung cell comprising contacting said cell with an amount of *hedgehog* antagonist effective to stimulate lamellated body formation.
16. A method of claim 14 or 15, wherein said lung cell is present in the lung tissue of a premature infant.
17. A method of any one of claims 1-15, wherein said *hedgehog* antagonist is selected from a small molecule having a molecular weight less than 2000 daltons, a *hedgehog* antibody, a *patched* antibody, a *smoothened* antibody, a mutant *hedgehog* protein, an antisense nucleic acid, and a ribozyme.
18. A method of claim 17, wherein said small molecule is selected from cyclopamine, compound A, tomatidine, jervine, AY9944, triparanol, compound B and functionally effective derivatives thereof.
19. A method of determining the likelihood that a cancer will develop in a tissue, comprising obtaining a tissue sample, and

determining levels of *gli* gene expression in said sample,
wherein overexpression of a *gli* gene indicates an increased likelihood that cancer will
develop.

20. A method of claim 19, wherein said *gli* gene is *gli-1*.

21. A method for treating a tumor in a patient, comprising administering to said patient an
amount of a *hedgehog* antagonist sufficient to decrease the grow and/or proliferation of the
tumor, wherein the tumor is associated with at least one of urogenital, lung, breast, prostate,
bladder, or colon cancer.

22. The method of claim 21, wherein *hedgehog* antagonist is administered as part of cancer
treatment regimen.